

SITUATION REPORT NO. 4
INCIDENT NO. 2001 - 072
DATE: July 30, 2001 TIME: 10:00 a.m.

TO: Governor John Hoeven
State Capitol
Bismarck, N.D. 58505

1. NATURE OF DISASTER: Summer Storms.
2. DEATHS AND INJURIES: No change from previous reports.
3. DAMAGES: A series of thunderstorms that moved into North Dakota last week caused flash flooding after torrential rainfall, large hail and gusty winds impacted the state. Rapid, heavy rainfall washed out roads and culverts, temporarily isolating residents. Because of high water tables in many areas of North Dakota, runoff infiltrated homes, inundated roads and overloaded sewer systems. High winds flattened crops and downed utility lines, leaving many residents without power for extended periods. The National Weather Service (NWS) issued periodic tornado, flash flood and severe storm watches and warnings.

The levels of Devils Lake and Stump Lake have leveled off after heavy rain fell over the Devils Lake Basin late last week. This morning, Devils Lake at Creel Bay measured 1,447.84 feet, and Stump Lake was at 1,412.07 feet. Today, the U.S. Geological Survey (USGS) reading showed 30 cubic feet per second (cfs) was flowing in the Jerusalem Channel between Devils Lake and Stump Lake. Last week, Devils Lake reached a new high on July 22, rising to approximately 1,447.95 feet. Since reaching that level, the lake has gradually dropped and risen in response to evaporation and precipitation, according to data provided by the State Water Commission. In the past week, the lake has measured between 1,447.8 and 1,447.95 feet

A flood statement issued July 29 by the NWS indicated that river levels continue to recede throughout western and central North Dakota and are below flood stage at all locations in the Cannonball, Heart and Souris River Basins. Heavy rain caused rapid rises of eight to 12 feet on July 27-28 along river in the Missouri and Souris River Basins. Levels, however, remained below flood stage. The only location where levels rose above flood stage occurred along the Cannonball River at Breien. After heavy rainfall on July 26, the river crested the next day at 11.2 feet. Flood stage is 10 feet. Dry conditions forecasted for the next few days will allow river levels to continue receding.

Red River levels at Fargo neared the 17-foot flood stage. The level on July 28 measured 16.2 feet. The five-day forecast indicates the river will recede to 16 feet by August 2.

Ramsey County officials reported that high ground saturation was causing some basement water seepage. Township roads are saturated. Streets and roads were closed due to rapid rainfall. Heavy rainfall and high winds have caused crop damage. As of July 27, monthly rain totals for the cities of Devils Lake and Starkweather amounted to 4.25 inches and 3.85 inches, respectively.

In neighboring Benson County, thunderstorms during July 20-21 resulted in downed power lines and rainfall of up to five inches. Basements in the city of Maddock were flooded after power outages prevented sump pump operations. High water tables, winds and rain continue to erode roadbeds. Springs have developed in the middle of some roads.

On July 26-27 in Morton County, torrential rainfall flooded streets, underpasses, homes and businesses. Officials estimate that gravel washouts occurred at 100-plus rural road locations. A driver of one vehicle drove into a washout on County Road 82. In Mandan, where five inches of rain fell, a lagoon at the BP Refinery overflowed. Flooding forced the closure of many city streets. In the Flasher area, where up to five inches of rain fell, a bridge was washed out and roads were damaged. Approximately 6.5 inches of rain fell south of St. Anthony, inundating roads and temporarily isolating residents. Up to 2.5 inches of rain and heavy lightning impacted the New Salem area, where crop damage occurred. Another storm struck the county on July 20-21. High winds and heavy rain fell in the Morton County communities of Mandan, Glen Ullin, Hebron, New Salem, Flasher, and Almont. Hebron and New Salem also received pea-sized hail.

Flash flooding occurred in Grant County during a July 26 storm, causing heavy damage to roads, bridges and culverts.

In Adams County, a six-foot culvert on County Road #32 washed out when 5.5 inches of rain fell during a three-hour period on July 26. Officials closed the road until repairs can be made. Water flowed over other county and township roads, washing gravel into ditches and eroding roadbeds and shoulders. In the Hettinger area, a vehicle was damaged when high winds toppled a tree. Local fire departments reported that lightning caused several hay fires during the month of July. Small grain and summer fallow fields have been eroded.

In neighboring Hettinger County, rainfall of up to five inches impacted 20 north central and northeastern townships. One rural homeowner reported water had infiltrated the basement. Gravel washes occurred on roadways, and a road was closed when water began washing around a culvert. Two hay bales were washed into a ditch where they plugged a culvert, forcing runoff to back up.

High winds during last week's storms in McIntosh County uprooted trees and tore roofs off buildings. Crops and county roads were damaged. Officials reported rainfall of up to three inches, pea-sized hail and gusty winds. During the previous week, on July 14, the Wishek area received approximately four inches of rain.

Bottineau County officials received reports that water had infiltrated basements when gusty winds and heavy rain impacted the area on July 27. Other damages include road and culvert washouts. Rainfall amounts ranged from 1.5 inches in Lansford to 6.5 inches in Maxbass.

Some areas of Rolette County have received up to 10 inches of rain this month. Water seepage in basements and mold is a recurring problem for homeowners. During the most recent storm on July 27, up to six inches of rain fell in the Peace Garden area

while other areas received two to three inches of rain. Water was flowing over a roadbed at six locations, and pipes were partially washed out at two locations. Hilltops in the northwestern corner of the county showed gravel loss because of hard rain. Crops have received extensive damage as a result of recent storms.

In McHenry County, where crops were lodged, up to six inches of rain fell during a 12-hour period on July 27.

Pierce County officials have reported more damage sites on roads after 7.33 inches of rain fell from July 6 to July 27.

In Grand Forks County, minor urban street flooding occurred when up to 2.5 inches of rain fell on July 27. During another storm that occurred on July 18 runoff caused damage to 20 buildings on the University of North Dakota campus. Substantial damage occurred at the Engelstad Arena I, where the lower level was inundated with water. Power to the building was interrupted after the inundation of a switch gear, pumps, ice-making equipment and lockers. At Witmer Hall, water followed a conduit into the building and on to a transformer, causing the transformer to burn out and leaving the building without power.

Stutsman County officials have received reports of sewer backup in homes located in the southwestern portion of Jamestown. Officials attribute the sewer-related problems to record releases of 800 cfs from the Pipestem Dam, high ground water tables and ground water infiltration of an aging sanitary sewer infrastructure. A lift station is handling four times the amount of sewage, running approximately 24 hours a day despite continued reductions in releases from Pipestem Dam. Two auxiliary pumps have been installed at manholes to assist with lift station operations. In June, backup pressure from the sewer system unseated some of the toilet and drain plugs in homes. High ground water tables are preventing inspections of the sewer infrastructure.

Minnkota Power Cooperative personnel estimate tornado activity on July 17 caused \$2,000,000 damage to the company's 345-kilovolt transmission line. In Stutsman County, 1.21 miles of damage included eight structures at a cost of \$540,000 and in Kidder County, 3.35 miles of damage included 21 structures at a cost of \$1,460,000.

Officials from Northern Plains Electric Cooperative estimate that in Stutsman County the cost to repair and replace its electrical poles and lines leading to irrigation sites will be \$50,000. The tornado on July 17 resulted in 24 broken three-phase poles, 10 broken single-phase poles, and five reset three-phase poles. In Kidder County, approximately \$10,000 of damage occurred.

According to a U.S. Department of Agriculture (USDA) Flash Situation Report produced by the Farm Service Agency, up to five inches of rain during July 13-16 caused 94,000 acres of crop loss, affecting 120 farms in Towner County. On July 19, five southern townships in Burke County were hit with hail, causing a loss of 30,700 crop acres at 20 farms. The USDA also reported baseball-sized hail, pounded Upland and Border Townships in Divide County on July 20. This hail struck 20 farms and destroyed 10,150 crop acres. Beyond the loss of crops in the three counties, substantial damage occurred to farm dwellings, service buildings and farm equipment.

In Kidder County, during July 17-23, thunderstorms accompanied by high winds twisted and snapped large trees and destroyed a Quonset and grain bins on one farm. Some rural residents experienced power outages up to six hours.

4. RESOURCES:

LOCAL: Entities responding to the emergency include: public works departments, law enforcement agencies, communication centers, emergency management offices, fire and rescue teams, elected officials and administrative offices.

STATE: N.D. Highway Patrol, State Radio Communications, N.D. Department of Transportation, N.D. National Guard, N.D. Department of Health, North Dakota State University (NDSU) Extension Service and the N.D. Division of Emergency Management have been monitoring the situation.

FEDERAL: The National Weather Service continues to monitor conditions and to issue detailed weather information. The Farm Service Agency within the USDA has been updating information concerning damages incurred in the agricultural sector.

5. VOLUNTEER ACTION: In Grant County, residents are assisting with debris removal.

6. MAJOR ACTIONS: Local and state officials are conducting initial damage assessments to determine the extent of damages to public properties and infrastructure caused by recent severe summer storms.

The N.D. Department of Health recently issued a news release that provided information about cleanup and health concerns related to mold. The news release can be found on the Internet at <http://www.health.state.nd.us/ndhd/press/n010718.htm>.

The N.D. Highway Patrol assisted local law enforcement officials in traffic control, road and street closures and monitoring travel dangers during and immediately following storm activities.

The Grant County Board of Commissioners issued a disaster declaration as a result of damages caused by torrential rainfall on July 26. The Adams County Commission issued an emergency declaration based on excessive summer storms and torrential rains that occurred between July 4 to July 28, 2001.

7. ASSISTANCE NEEDED: No additional requests have been received.

8. OUTSIDE HELP ON SCENE Crews from Minnkota Power Cooperative and Northern Plains Electric Cooperative continue to repair downed lines, towers and poles.

9. OTHER Appropriate state and local emergency operations plans have been implemented.

Situation Reports published by North Dakota Emergency Management are posted on the Division's Internet home page. The address is <http://www.state.nd.us/dem>.

Douglas C. Friez, State Director